Trauma Registry Users Group (TRUG) Meeting Minutes
Wednesday, January 27, 2009 - 9:30 a.m. – 11:00 a.m.
Location: Arizona Dept. of Health Services
150 North 18th Avenue Phoenix AZ 85007
5th Floor – 540A Conference Room
Contact: Anita Ray Ng 602-542-1245 raya@azdhs.gov

Attendees:

Bill Ashland	Paul Bowlby	Joel Bunis	Vatsal Chikani	Lillian Duncan
Starre Haney	Claire Holmes	Shawna Hosler	Suzanna Hubbard	Xan Hummel
Rose Johnson	Cynthia Marks	Beth Mlenar	Melissa Moyer	Angela Parker
Donna Quay	Anita Ray Ng	Eugenia Sims	Philomene Spadafore	David Villa
Cristina Wong	Heather Young			

A)   2009 Data Changes
   1) Received confirmation that all reporting hospitals have imported the 2009 picklist
       updates. No picklist problems were reported at this time.
   2) Refer to attachment "2009 ASTR data dictionary highlights" for more information on
       2009 data changes.
       a) ASTR 2008-2009 Data Dictionary format changes:
           (i) To assist users with reporting across multiple years of trauma data, a text box
                was added to the 2008-2009 ASTR Data Dictionary (left hand side under the
                data element name) to document any field or data entry changes that were
                made. Changes from the 2005-2007 reporting year to 2008 are listed as a "2008
                Change:" (effective for ED/Hospital Arrival Dates January 1, 2008 forward). Any
                change from the 2008 reporting year to 2009 will be listed as a "2009 Change:"
                (effective for ED/Hospital Arrival Dates January 1, 2009 forward). If a field did
                not have change, you will not see a text box under that data element name.
           (ii) If you are running reports on trauma data prior to 2008, be sure to use the ASTR
                2005-2007 Data Dictionary. Because the 2008 and 2009 data elements do not
                have many differences, these reporting years were combined into one data
                dictionary.
       b) New Data Element – Injury Event Details (narrative field) – Many hospitals already
           capture an injury narrative field, but so far this information has not been exported to
           the state. This information is needed at the state level for injury reports, E-code QA,
           and for processing data requests. Refer to the "2009 ASTR data dictionary
           highlights" regarding what the type of data ASTR needs in this field. For hospitals
           that do not have an injury narrative field, Lancet will need to update your database.
       c) Picklist Changes and Definition Changes
           (i) The following elements had minor picklist changes for 2009: System Access
                (Inclusion Criteria), Co-morbid Conditions, E849 Injury Location, Position in
                Vehicle/Vehicle Type, Transport Type, Transported From(Origin), Field Airway
                Management, Temperature Route, and Complications. Refer to the "2009 ASTR
                data dictionary highlights" for specific information on these picklist changes.
       d) Importance of following the ASTR data dictionary instructions when entering data -
           For 2008 data forward, ASTR will be completing a more detailed validation of the

trauma data to ensure it matches the instructions as outlined in the ASTR Data Dictionary.   These checks are also necessary in order for a file to pass the NTDB validation. The closer that your hospital data matches to the ASTR Data Dictionary instructions, the fewer errors your hospital will have to fix.

B) Hospital and State Databases – ensuring consistency

1) Data entry consistency is important. It is impossible to do aggregate data reporting if we do not all use the same data element definitions, picklists, etc. Thank you for your hard work in standardizing the AZ trauma data elements. We've come a long way and have accomplished so much since we started data conversion in 2005! ☺

2) Data export/import consistency

a) Every data element in Trauma One$^®$ is stored under a specific table and field name. When the data is exported from a hospital database to the state database, this table name and field name tell the state database where to store the data. Some of the data elements (such as vital signs) also have a "carephase" to identify which type of data is being received and how it should be stored. This data schema is all "behind the scenes", as registrars will only see data entry prompts when entering data.

b) In 2008, major changes were made to the state and hospital databases. Some of the table, field and carephase names (schema) are not consistent, causing some fields to show up blank in the ASTR database even if the hospital entered the data. The fields most affected were Total Reimbursements and Referring Facility Vital Signs.

c) Lancet is creating a program to fix the identified schema problems. They will start this Thursday to implement the fix at each hospital.

d) After the schema is fixed at each hospital and at ADHS, the data will need to be re-exported by hospitals and re-imported by ASTR to fill in the blanks. Then we can continue to run the Blank Field Checks and know that system problems are not affecting the results.

3) Data Validation Tool / Blank Field Checks / Other report sharing

a) A standard AZ NTDB export and a standard AZ data validation tool are being created by Lancet. In order to share the same validation tool, NTDB export, and reports, hospitals need to capture the state-required data elements in the same format as ASTR. If your hospital alters any state required fields or chooses to capture required fields differently than the state system, your validation tool and reports will not work correctly. If your data is different, you will require customization. Any customization fees or documentation would be the responsibility of the hospital.

4) Standard statewide export to NTDB – Lancet was sent a spreadsheet documenting every national field and how AZ data should export to fit the NTDS/NTDB standard. Lancet is working on the AZ-specific export. No word yet if it is ready for testing. The final deadline for NTDB submission is May 15, 2009 and hospitals will need to get the data cleaned up beforehand so it passes submission.   More information to follow by email. ASTR does not have statutory authority to submit state data to NTDB. Reporting hospitals choose whether they want to submit their data to the national data set.

5) Other database checks that ADHS is doing to ensure consistency

a) Invalid picklist entry reports – ADHS is working with Lancet on resolving any 2008 transition errors. Reports to identify early 2008 invalid picklist entries are being generated so that the invalid data can be changed. Hospitals will be given a copy of the report to approve before any changes are made by Lancet. Invalid picklist entries not due to the 2008 transition will be the responsibility of the hospital to fix.

b) Data Validation Tool – ADHS is working with Lancet on creating a validation program to clean up the data. This validation tool will include NTDB validation checks in addition to AZ-specific checks. More information will be sent to TRUG, as it is

available. Timeframe for completion has not yet been determined. We will likely start some data clean-up before the final tool is available.

6) Data Checks that hospitals must perform on their own databases to ensure consistency with the data dictionary (ADHS cannot check or fix these):

   a) Data Links / Interfacing set up by hospitals to import data from medical records or billing into Trauma One®

      (i) Examples of common problem areas:

         (a) ED Disposition – Reports were passed out to individual hospitals highlighting any invalid 2008 picklist entries. ASTR is still receiving (from only a few hospitals) data values from the 2006 picklist (ex: HOME, PICU, PSYCH). This picklist was changed January 1, 2007 so these values should not be showing up. Please refer to the ASTR 2008-2009 Data Dictionary for which short text values are acceptable. If your hospital's data link needs to be updated, please do so asap.

         (b) Hospital Disposition – Reports were passed out to reporting hospitals highlighting any invalid 2008 picklist entries. Invalid entries are being received from a few hospitals, which appear to be due to incorrect data links. Please refer to the ASTR 2008-2009 Data Dictionary for which short text values are acceptable.

         (c) Financials – Primary and Secondary Method of Payment have the most invalid picklist entries. If you are using a data link to your hospital's billing system, please work with Lancet and your IT to ensure insurance companies are mapping to a corresponding short text value from the ASTR data dictionary. All values must fit one of the state-required 2008 picklist values. Example: For AHCCCS patients, there is one acceptable code - MEDICAID/AHCCCS. Submitting codes like AHCCCCS, AHCCCS-MERCY, MERCY CARE, APIPA, etc. will not be accepted. The AZ 2008 picklist is based on the NTDS payer list.

         (d) Lowercase values are showing up in the data. All values in Trauma One® are entered in uppercase (the required format). What we have recently noticed is that some lowercase values are showing up in the data. It seems to be a problem with hospital data links. Please make sure all data link/interfacing instructions import in all capital letters.

   b) Autofills in place during data entry

      (i) Please check any autofills that you have in Trauma One® to make sure they are current. Autofills are very useful in Trauma One. A common example of an autofill that saves data entry time is the *NA autofill when NO EMS CARE is selected for EMS Agency.

      (ii) However, there may be some autofills leftover from previous data years that are filling in the wrong data. For example, some systems are autofilling the Position in Vehicle field as soon as an E-code is entered. Autofilling the Position in Vehicle field will not give ASTR the supplemental E-code data we need. In addition, some hospitals are autofilling the Final Outcome field as L (Lived) for all patients but forgetting to change it to D (Died) if the patient expired.

C) Data entry of vital signs in Trauma One

   1) Prehospital vitals – data entry changes, NTDB export

      a) Lancet is writing a program to move the prehospital vitals into the prehospital transport section. One set of vitals signs will be entered per EMS agency. If vitals are unknown, flag as *ND (Not Documented). A copy of the draft EMS screenshot

was distributed to TRUG. Lancet plans to start these changes on Friday and they expect to be done within 5 business days.

   b) More discussion is needed with Lancet to determine if anything should be done with the 2008 prehospital vitals data that has already entered. Having prehospital vitals in two different sections makes reporting more difficult. This item will be added to next TRUG meeting agenda.

2) Referring Facility 1 and 2 vitals

   a) Only the initial SBP, GCS, RR and RTS are required for First and Second Referring Facility vital signs. If the vitals were not received from the referring facility, use *ND (Not Documented). If patient was not treated by a referring facility before your hospital, use *NA (Not Applicable). Hospitals may capture additional referring facility vital sign information if they wish, but only these fields will be exported to ASTR.

3) ED/Hospital vital signs. Only the first recorded ED/Hospital vitals are submitted to ASTR. Hospitals may capture additional hospital vitals if they wish.

D) TRUG user question: What are registrars entering for the Method of Payment (type of insurance) if AHCCCS status is listed as "pending"?

   1) Consensus was that the patient is flagged as SELF PAY until AHCCCS is approved. If the patient is then approved for AHCCCS, the Payment Method will be updated and the update sent in the next quarterly data submission.

E) TRUG user question regarding alcohol testing of trauma patients. Answers from reporting hospitals suggest that each hospital has different criteria regarding when and which patients to screen for alcohol.

F) Further questions, concerns or database problems to report?

   1) Question on how to code a patient who was already in the reporting hospital for another condition and then sustained an injury at the reporting hospital: In this instance, the ED/Hospital Arrival Date/Time would be the date and time when the injury occurred. ED/Hospital arrival indicates when the patient came to your hospital "for this injury event". Do not use the initial hospital arrival or it will display as a data entry error.

   2) TRUG members discussed how each hospital is capturing blood transfusion data (not reported to ASTR).

   3) Question from TRUG user on data entry for planned surgical readmissions (readmissions are not reported to ASTR).

G) 2009 TRUG meeting schedule (posted online):

   • Tuesday, January 27 - 9:30 am – ADHS Conference Room 540-A
   • Wednesday, April 22 - 9:30 am - ADHS Conference Room 540-A
   • Wednesday, July 22 - 9:30 am - ADHS Conference Room 540-A
   • Wednesday, September 30 - 9:30 am - ADHS Conference Room 540-A

2009 ASTR data dictionary highlights:

1. 2008 changes / 2009 changes (listed under Data Element Descriptions when applicable)

The first thing you will notice about the 2008-2009 ASTR Data Dictionary is that additional details were added regarding any changes from the 2005-2007 data dictionary to the 2008 data dictionary. 2009 changes are also noted under the data element description. These comments were added to assist users in reporting data from multiple years.

2. System Access (Inclusion Criteria)

The ASTR Inclusion Criteria now include an interfacility transfer option. A patient must meet at least one of four criteria in order to be considered an ASTR patient for trauma data submission. Patients meeting the criteria must be submitted to ASTR.

The data entry instructions are the same as 2008 – Please select ALL criteria that apply. A patient may meet 1, 2, 3 or all 4 criteria. Selecting all that apply will help ASTR assess the trauma system and the inclusion criteria. The state picklist has been updated to:

EMS_TRIAGE	Triaged from Scene to your facility per EMS Trauma Protocol
INTERF_TRNSFR	Acute care injury transfer in or out of your facility by EMS
ACTIVATION	Trauma Team Activation at your facility
ICD9_REVIEW	Admission or Death and met ASTR ICD-9-CM Inclusion Codes

Please refer to the ASTR Inclusion Criteria for detailed information regarding this field.

3. Registration Number / Medical Record Number

Data entry instructions were added requesting users not to add leading or trailing zeros unless they are actually part of your official hospital numbering system. Registration Number and Medical Record Number should be entered in the same format as your facility's Hospital Discharge Data (HDD), as we will be using these identifiers to link trauma and HDD data.

4. Alternate Home Residence

NTDB has provided definitions for this picklist. See Appendix H of the data dictionary.

5. Co-morbid Conditions

"Pregnancy" was added back to the co-morbidity picklist, per TRUG request.

"No NTDS co-morbidities are present" was removed from data entry view for 2009. "OTHER CO-MORBIDITIES EXIST (not on this list)" was added for 2009.
> If a patient has any other co-morbidities not on the state list, select the OTHER option. If patient did not have any co-morbidities at all, use Not Applicable (*NA).

6. Injury Location Code - E849

For 2009, "Residential Institution" was expanded into a sub-picklist to identify the type of residential institution where the injury incident occurred. New sub-picklist choices:

7A	Acute care hospital
7B	Jail / Prison / Correctional Facility
7C	Nursing home
7D	Psychiatric facility (inpatient)
7E	Other residential institution not listed

7. Street Address of Injury Incident

Several data entry instructions were added to facilitate geocoding of trauma incidents.

Most importantly, if you are entering the name of the injury location and an address, please first enter the street address, then put the place name in parentheses. From the data dictionary:

> **"If you are entering a location name plus an address, first enter the street address, followed by the location name in parentheses.** Example: 26700 S HWY 85 (ASPC LEWIS). **If you are entering a place name without an address, enter the place name in parentheses.** Example1: (LAKE POWELL) Example2: (SUPERSTITION MOUNTAINS)"

Other important data entry instructions added for the Injury Incident Address:

> This field is very important. To facilitate geocoding, the first preference is to submit a full street address. Second preference would be the intersection.

> Enter the full street address using the abbreviations provided below. Example1: 123 N 19TH AVE APT 12 Example2: 1234 S 8TH ST

> If only the intersection is known, please enter intersection using the & sign. Example1: 7TH ST & MCDOWELL Example2: 19TH AVE & VAN BUREN

> If only the milepost is known, please enter the highway, followed by the milepost (abbreviate as MP) Example1: I-10 E MP 145 Example 2: HWY 89 MP 470

> Please use the following abbreviations (with no punctuation): North = N, South = S, West = W, East = E, Street = ST, Apartment = APT, Avenue = AVE, Road = RD, Drive = DR, Circle = CIR, Boulevard = BLVD, Suite = STE, Highway = HWY, Milepost = MP

8. Injury Event Details

New state field for 2009 but many hospitals already have an Injury Narrative field. Please refer to the ASTR directions regarding what needs to be submitted in this field. From data dictionary:

"Text narrative field used to document the causes and circumstances of the injury event. This field will be used to supplement the E-code data, as there are instances where E-codes do not provide enough detail. This field may also be used for QA checks on the E-codes submitted.

Please provide a description of the injury incident, with enough information so that ASTR staff could select the appropriate E-code based on the text narrative.

If patient was injured while occupying a motor vehicle, please indicate the vehicle type and whether patient was the driver or passenger. Include any other important information, including type of crash, extrication information, etc.

If patient was injured by a weapon or object, please document the type of object.

If injury event was sports-related, please include the type of sport and how the injury was sustained.

Include information regarding the intent of the injury event: unintentional, assault, self-inflicted or undetermined intent.

This narrative field is meant to capture details regarding the injury event and the cause of injury. Demographic information, diagnoses, and protective device details are not captured in this field."

9. Patient Position in Vehicle

This field is now referred to as "Position in Vehicle / Vehicle Type". Field has been expanded to clarify the E-codes for better data reporting.

A new sub-picklist was added – "Rider of off-road vehicle (street and non-street use)". Under this category, you will find the 2008 ATV option, but there are now many more choices for off-road vehicle types.

Railway Occupant was added as a new choice for 2009.

Watercraft and Aircraft choices were expanded with a sub-picklist to identify the type of water and aircraft involved.

10. Transport Type - Prehospital Section

You will now see three choices instead of two. A First Responder option was added to assist with data reporting and the quality checks.

Instructions are the same as 2008: **"All records must have one entry pertaining to the patient's arrival into your facility, even if there was no prehospital EMS involvement or run sheet is unavailable."**

2009 picklist:

INTO_REPT_HOSP	Arrival/transp of patient INTO YOUR FACILITY (EMS & non-EMS)
FIRST_RESP	**First Responder Care (non-transport)**
OTHER	Any other prehospital care or transport

11. Transported From (Origin) – Prehospital Section

"From nursing home" and "From jail or prison" were removed from this picklist. Instead select "From Injury Scene". (This information is now found in the Injury Location E849 field under the "Residential Institution" sub-picklist.)

You will notice the same data entry instructions as 2008. Please read carefully:

> **If patient was injured at home and was transported from home, select "From Injury Scene".** The only time you will select "From Home but Home was NOT the injury scene" is if patient was NOT injured at home, went home before going to the hospital, and then was taken from home to the hospital.

INJ_SCENE	From Injury Scene
REFER_FAC	From Referring Hospital
CLINIC_OFF	From Clinic/Doctor Office
URGENT_CAR	From Urgent Care Center
EMS_REND	From EMS Rendezvous Point
HOME	From Home but Home was NOT the injury scene
OTHER	From Other Location (NOT injury scene)

12. Run Sheet Number

If an EMS run sheet (PCR) was received by your hospital, it is required to submit the Run Sheet Number. This number will be used to link trauma data to the EMS Database.

13. Field Airway Management

Pulse Oximetry, ETDLAD and LMA were added to the picklist.

14. Temperature

"Temporal Artery Sensor" was added to the picklist.

15. Complications

"No NTDS complications are present" was removed from data entry view for 2009. "OTHER COMPLICATIONS EXIST (not on this list)" was added for 2009.
> If a patient has any other complications not on the state list, select the OTHER option. If patient did not have any complications at all, use Not Applicable (*NA).